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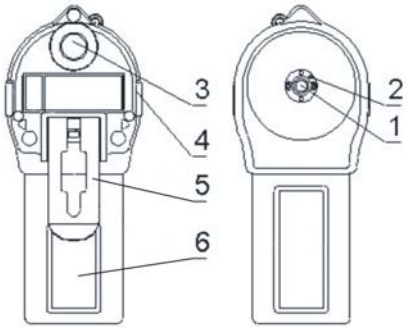
User manual for small KSE-LIGHTS handlamp

Model KS-8650 with ATEX permission in compliance with 94/9/EG

Please read the manual before use.

I. Features and functions



1. **Main LED**
2. **Charging indicator LED**
3. **Powerswitch for main LED**
4. **Protection for charging jack**
5. **Clip holder**
6. **Type plate**

II. Technical Parameters

Power Supply: Lithium-Ion battery 3.2 V 3.0 Ah
Illumination time: 1. stage: 27 h, 2. stage: 14 h, 3. stage: 10 h
Illuminance in 1 m distance with charged battery:
1. stage: >1000 Lux, 2. stage: >2000 Lux; 3. stage: >3000 Lux
Illuminance at the end of illumination time: ≥350 Lux
Battery warranty: ≥ 80 % capacity after 500 times recharging
Impression safety class: IP 67
Waterproof up to 1m depth

Working temperature: -20 °C … +60 °C
Charger: Input: AC 100 - 250 V
Output: DC 5.1 V
Charging current: < 600 mA
Charging time: < 7 h
Weight: 160 g
Height: 125 mm

Explosion-proof mode: Ex II 2G Ex ia IIC T4

III. Use

1. The lamp must be charged before using it. For charging please connect the lamp with charging device. The indicators in charger and lamp will start glowing. When charging is completed, the charging current will be stopped automatically and the LED in the charger will turn to green. The indicator in the lamp however will stay red. **Before using the lamp, please close the opening in the charging jack. Defective protective plugs must be necessarily replaced!**
2. The powerswitch on the backside of the lamp has three stages: **Press the switch shortly; after one second the lamp will glow in the first stage**. Another short press will turn the lamp to the next stages and will turn it off at least. The light can also be turned off by pressing the switch for 2 seconds. When switched on again, the lamp will be in the lighting stage that was used at last.
3. The lamp is provided with a safety circuit against overload, too deep discharge, high voltage and short circuit. The lamp can be charged even after short use without reducing the capacity of the battery.

IV. Warning

1. **Do not let the lamp drop down and prevent it against impacts.**
2. **Always seal the charging jack with the provided protection to prevent it from being soiled.**
3. **Please protect the glass surface from scratches to prevent the illumination being spoiled.**
4. **Do not use the lamp in environments beyond working temperatures.**
5. **Keep the lights off when charging the battery and only charge with the original KSE-LIGHTS charging devices.**
6. **Do not remove type plate or serial number.**
7. **Never open the lamp or the charging device. In case of failure, please return the lamp to seller, NEVER open!**
8. **Do not throw the lamp into fire, the battery could explode.**
9. **Never direct the light of the lamp directly in the eyes of human beings or animals!**
10. **The lamp or the charging devices may only be opened by specialists that are authorizised by KSE-LIGHTS. Being opened without authorization, the lamp will lose its permission and safety can no longer be guaranteed.**

11. Never look at visible LED radiation with optical instruments.
12. Looking at the radiation source with optical instruments can cause danger for eyes.
13. EN 60825-1:2003; < 8,4 · 10^5 cd/m²; 400 nm - 780 nm.

V. Permission for use

1. The lamp is certified for group II and may be used in industrial areas and by fire brigades in areas with explosible atmospheres.
2. The lamp is certified for category 2 (= zone 1 and 2 of explosiveness). It may be used in areas where the occurrence of explosive atmospheres caused by gases or vapour is very probable (10…1000 hours / year).
3. The lamp has the class of protection ib, intrinsically safe. The circuits of the lamp will not, neither in normal use nor in case of one rare failure, produce sparks that will be able to ignite an explosive atmosphere.
4. The lamp is certified for gases of group IIC and may also be used if gaes of group IIA or IIB are present.
5 The lamp is certified for temperature class T4 if used in the temperature range –20 °C to +60 °C. The lamp may not be used if gases are present that will ignite below 135 °C.

6. The lamp may be charged only outside of explosive areas.

VI. Service

This product is guaranteed to work accordingly for two years after purchasing. The time of warranty starts with the date on purchasing invoice. The guarantee extends over defects of material or malfunctions, that are not caused by improper use. In case of guarantee please fill out the customer service form properly and return this together with lamp and a copy of the purchasing invoice to your local distributor. The lamp will be repaired or a replacement will be issued.

Never open lamp or charging device! Do not use the lamp any longer if parts are defective or missing. For subsequent damages caused by defective parts, the warranty is void.
In case of contravention guarantee and safety of usage will get lost.

For the following conditions we will repair the product with appropriate charges:

1. Beyond the two-year warranty or if the customer service form is not properly filled out
2. If the serial number is missing or differing from number inside the product
3. If lamp or charging device are damaged by improper operation
4. If lamp or charging device were opened or cracked or damaged by falling or colliding.
5. **In case of subsequent damages caused by further use of lamp with defetive parts (e. g. housing, rubber protection of switch or protection of charging jack).**

An extensive amount of accessories is available and displayed at our website: www.kse-lights.com.

Customer Service Form

Serial No.:	Model:
Date of purchase:	Phone:
Name:	Address:
Company:	Failure:

Status: November 2008